

Cost of Living and Budget

1/17/17

What does the phrase "cost of living" mean to you?

how much money spent on housing, food, utilities, hygiene products, make-up, car + insurance, clothes/shoes, health care/ins., education

What is a budget?

how much you have and how much you can spend
how you will spend it

Cost of Living and Budget

Household Budget Exploration Project

Income

Expenses: Fixed, Variable

Graphs (3): Income, Fixed Expenses, Variable Expenses

Spreadsheet: Excel or Google Docs Spreadsheet

By Tuesday, 1/24/17:

List of income & expenses for your household

IWBAT

- discuss types of wages and how to convert between the types.

Cost of Living and Budget: Types of Wages

Wages - how much you earn for working
usually paid in money

Hourly wage - how much money you earn per
hour worked

Salary - how much you get paid for a year's
work (usually paid monthly)

IWBAT discuss types of wages and how to convert between the types.

Cost of Living and Budget: Types of Wages

Overtime - work more than your 40 expected hours per week (usu. paid 1.5x regular)

Converting from an hourly wage to annual salary:

Johnny makes \$9 per hour for the first 40 hours he works each week. If he works eight hours per day, six days per week for three weeks per month, what is his annual pay?

$$\begin{aligned} \text{Reg. } \$9 \times 8 \text{ h/d} &= \$72/\text{d} \quad (6 \text{ d/w}) = \$432/\text{w} \quad (3 \text{ w/m}) = \$1296/\text{mo} \times 12 \text{ mo/yr} \\ &= \$15,552/\text{yr} \text{ Reg} \\ \text{OT } 8 \text{ h/w} (\$4.50/\text{h}) & (3 \text{ w/m}) (12 \text{ mo/yr}) = \$1,296/\text{yr} + \text{OT bonus} \\ & \underline{\hspace{1.5cm}} \\ & \$16,848/\text{yr} \end{aligned}$$

IWBAT discuss types of wages and how to convert between the types.

Cost of Living and Budget: Types of Wages

Converting from annual salary to an hourly wage:

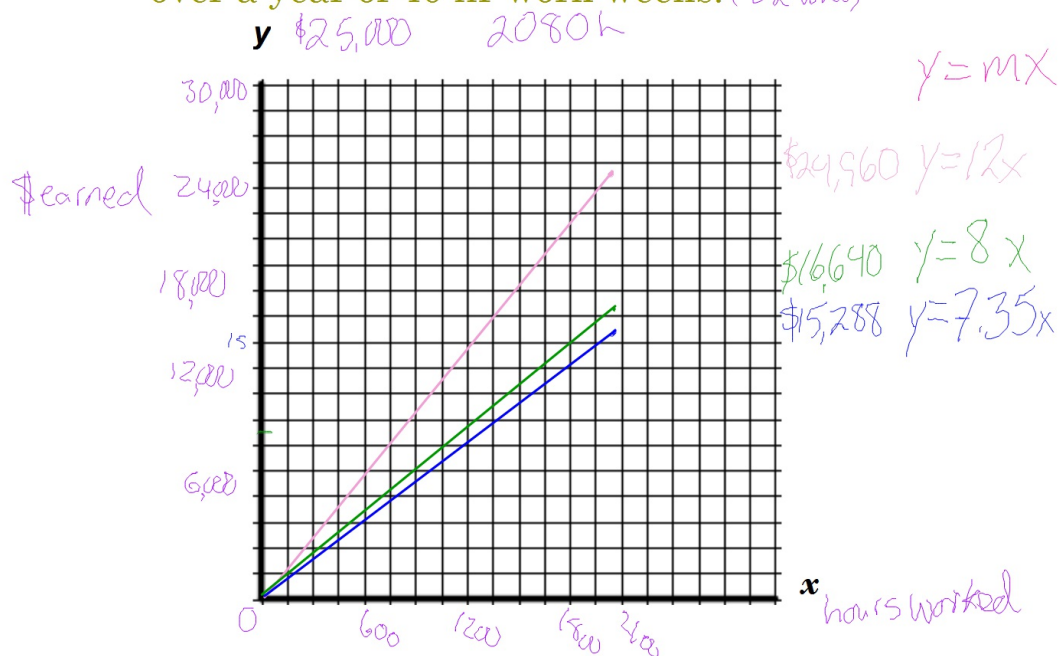
Sonia has accepted a position which pays \$37,000 per year. If she averages 55 hours per week for 42 weeks per year, what is her effective hourly wage? \$/h

$$\begin{aligned} \$37,000/\text{y} / 42 \text{ w} &= \$880.95/\text{w} / 55 \text{ h/d} = \$16.01 \text{ per hour} \\ 55 \cdot 42 &= 2310 \text{ w} \quad \$37,000 / 2310 \text{ w} \\ & \underline{\hspace{1.5cm}} \\ & \$16.01 \text{ per hr} \end{aligned}$$

IWBAT discuss types of wages and how to convert between the types.

Cost of Living and Budget: Types of Wages

Jesus is paid \$7.35/hr. Sara is paid \$8/hr.
Shannon is paid \$12/hr. Plot their earnings
over a year of 40 hr work weeks. (52 wks)



IWBAT discuss types of wages and how to convert between the types.

Cost of Living and Budget: Types of Wages

Alfonso

Complete Practice Problems 2.1.2

\$199.50/wk

\$9.50/h

21 h/wk

Graph top to bottom:

Worker A

Worker C

Worker B

\$199.50/wk \times 52 wk/yr

= \$10,374/yr

← divide

→ multiply

By Tuesday, 1/24/17:

List of income & expenses for your household

IWBAT discuss types of wages and how to convert between the types.

Cost of Living and Budget: Compensation Packages 1/20/17

What is compensation? What forms can it take?

You receive something for a good job done

money

paid vacation

gift card

free product/service

discount

award/certificate

raise

promotion

celebration/party

Company car

phone

insurance

Retirement

Cost of Living and Budget: Compensation Packages 1/20/17

IWBAT discuss compensation packages, what may be included in one, and how to calculate the value of a compensation package.

Cost of Living and Budget: Compensation Packages

Insurance

✓ Life
Auto
Home
✓ Worker's Compensation
phone
✓ Medical/Health
Renters
Pet
Body Parts (models)
Business/Structure
Crop ins.
✓ Dental ✓ Vision

Vacation/PTO

Maternity leave
paternity leave
personal days
paid holidays
PTO/Vacation
Medical leave
Sick day
flex time

IWBAT discuss compensation packages, what may be included in one, and how to calculate the value of a compensation package.

Cost of Living and Budget: Compensation Packages

Retirement

for when you are not going to work full time anymore

401(k)/403(b) IRA Roth

Employer contribution money put in on your behalf

Matching contribution employer puts in money only if you put in money

Contribution limits a cap on how much money goes into your account

IWBAT discuss compensation packages, what may be included in one, and how to calculate the value of a compensation package.

Cost of Living and Budget: Compensation Packages

Total Compensation

All your benefits + wages

By Tuesday, 1/24/17:

List of income & expenses for your household

IWBAT discuss compensation packages, what may be included in one, and how to calculate the value of a compensation package.

Cost of Living and Budget: Compensation Packages

Total compensation

An architect's compensation package includes the total cost of a \$250-per-month health insurance plan, the total cost of a \$35-per-month life insurance plan, and a salary of \$55,000 per year. What is the yearly value of the compensation package?

$$\begin{array}{l} HI \quad \$250/mo \times 12 mo/y = \$3000/y \\ LI \quad \$35/mo \times 12 mo/y = \$420/y \\ \hline \quad \quad \quad \$3420/y \\ \text{Salary} \rightarrow + \$55000/y \\ \hline \quad \quad \quad \$58420/y \text{ total compensation} \end{array}$$

IWBAT discuss compensation packages, what may be included in one, and how to calculate the value of a compensation package.

Cost of Living and Budget: Compensation Packages

What is the annual value of a 401(k) plan in which the employer agrees to match 2.5% up to \$15,000 if the employee contributes \$15,000?

$$\begin{aligned} \text{Annual Value} &= \text{employer} + \text{employee} \\ \text{employer} &= \$15,000 \times 0.025 = \$375 \\ &\quad + \$15,000 \\ &= \$15,375 \end{aligned}$$

What is the true hourly wage of a job that pays \$17 per hour and allows 10 hours of paid time off for every 200 hours worked?

$$\begin{aligned} \$17/h(210h) &= \$3570 \\ &\quad \underline{210h \text{ worked}} \\ &= \$17.85/hr \text{ worked} \end{aligned}$$

IWBAT discuss compensation packages, what may be included in one, and how to calculate the value of a compensation package.

Cost of Living and Budget: Compensation Packages

Convert hh:mm time into decimal time & reverse.

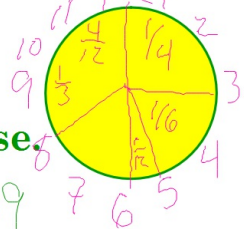
Example: 2:30 is 2h 30min which equals 2.5h

$$\begin{aligned} 1:15 & \rightarrow 1.25h \quad \frac{15}{60} = \frac{1}{4} \\ 2:20 & \rightarrow 2.33h \quad \frac{20}{60} = \frac{1}{3} \\ 3:45 & \rightarrow 3.75h \quad \frac{45}{60} = \frac{3}{4} \\ 6:10 & \rightarrow 6.17h \quad \frac{10}{60} = \frac{1}{6} \end{aligned}$$

Thur Th. R
MTWRF

Convert decimals into percents and reverse.

$$\begin{aligned} 0.36(100) &= 36\% \quad \frac{\text{decimal}}{1} \times 100 = \% \\ 1.24 &= 124\% \quad \frac{\%}{100} = \text{decimal} \\ 9\% &= 0.09 \quad \frac{\%}{100} = \text{decimal} \\ 251\% &= 2.51 \quad \frac{\%}{100} = \text{decimal} \end{aligned}$$



IWBAT discuss compensation packages, what may be included in one, and how to calculate the value of a compensation package.

Cost of Living and Budget: Compensation Packages

A compensation package that includes vacation pay, retirement, and life insurance but allows all employees to choose which compensation they prefer. This is known as a *cafeteria plan*.

If an employer agrees to pay a portion of the college tuition of an employee, this is known as *educational reimbursement*.

IWBAT discuss compensation packages, what may be included in one, and how to calculate the value of a compensation package.

Cost of Living and Budget: Compensation Packages

Floyd's employer purchased a health insurance plan that costs \$825 per month. Floyd pays \$105 toward the plan each month. What is the annual value of the employer's contribution?

$$\begin{array}{r} \$825/\text{mo} \\ \rightarrow - \$105/\text{mo} \\ \hline \$720/\text{mo} \\ \times 12 \text{ mo/y} \\ \hline \$8640/\text{y} \end{array}$$

A corporate attorney has weekends off and has 30 paid vacation days per year, including holidays that fall on weekdays. If his salary is \$119,600 per year, what is his pay per workday?

$$\begin{array}{r} 365 \text{ d/y} \\ - 30 \text{ vacay} \\ \hline 335 \\ - 104 \text{ WS} \\ \hline 231 \text{ workdays} \end{array} \quad \begin{array}{r} \$119,600 \\ \hline 231 \text{ workdays} \\ \hline \$517.74/\text{workday} \end{array}$$

IWBAT discuss compensation packages, what may be included in one, and how to calculate the value of a compensation package.

Cost of Living and Budget: Compensation Packages

Last year, Rachel contributed \$105 each month toward her 401(k) account. If her employer matched 17% of her contributions, what was the total amount contributed to the 401(k) at the end of the year?

$$\begin{array}{r} 0.17(\$105) = \$7.85/\text{mo} \\ + \$105/\text{mo} \\ \hline \$122.85/\text{mo} \\ \times 12 \text{ mo/y} \\ \hline \$1474.20 \end{array}$$

IWBAT discuss compensation packages, what may be included in one, and how to calculate the value of a compensation package.

Cost of Living and Budget: Piece Rate

1/25/17

An assembly technician has weekends off and has 15 paid vacation days per year, including holidays that fall on weekdays. If her salary is \$63,700 per year, what is her pay per workday?

$$\begin{array}{r} 365 \text{ d/y} \\ - 104 \text{ WE} \\ - 15 \text{ Vacay} \\ \hline 246 \text{ work day/y} \end{array}$$

$$\begin{array}{r} \$63,700/\text{y} \\ \hline 246 \text{ work day/y} \end{array}$$

$$= \$258.94/\text{work day}$$

IWBAT

- how to estimate hourly pay from piece rate
- model piece rates using scatter plots.

Cost of Living and Budget: Piece Rate

What is piece rate?

How much you earn for each piece of work completed.

Cost of Living and Budget: Piece Rate

Cliff worked 9 hours yesterday, produced 28 units, and earned \$8.75 for each unit produced. Find Cliff's average hourly wage.

$$28u (\$8.75/u) = \$245 \quad \xrightarrow{9h} \quad = \$27.22/h$$

$$\text{or } \frac{28u}{9h} = 3.11 u/h (\$8.75/u) = \$27.22/h$$

$$x (\$/u) = \frac{\$}{h}$$

IWBAT how to estimate hourly pay from piece rate, and model piece rates using scatter plots.

Cost of Living and Budget: Piece Rate

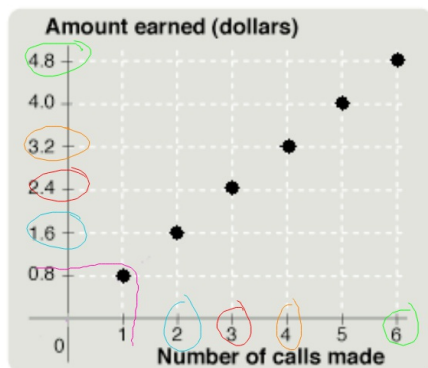
A property inspector gets paid \$350 for each property inspected. If it takes him 8 hours on average to inspect a property and he spends 48 hours each week inspecting properties, what is his average hourly wage?

$$\frac{\$350/\text{prop.}}{8h/\text{prop.}} = \$43.75/h$$

IWBAT how to estimate hourly pay from piece rate, and model piece rates using scatter plots.

Cost of Living and Budget: Piece Rate

A telemarketer earns a fixed amount for each call that he makes, as shown in the graph below. If the telemarketer makes 12 calls, how much will he earn in total?



$$12 \text{ calls } (\$0.8/\text{call}) = \$9.60$$

$$6 (\$1.60) = \$9.60$$

$$2 (\$4.80) = \$9.60$$

IWBAT how to estimate hourly pay from piece rate, and model piece rates using scatter plots.

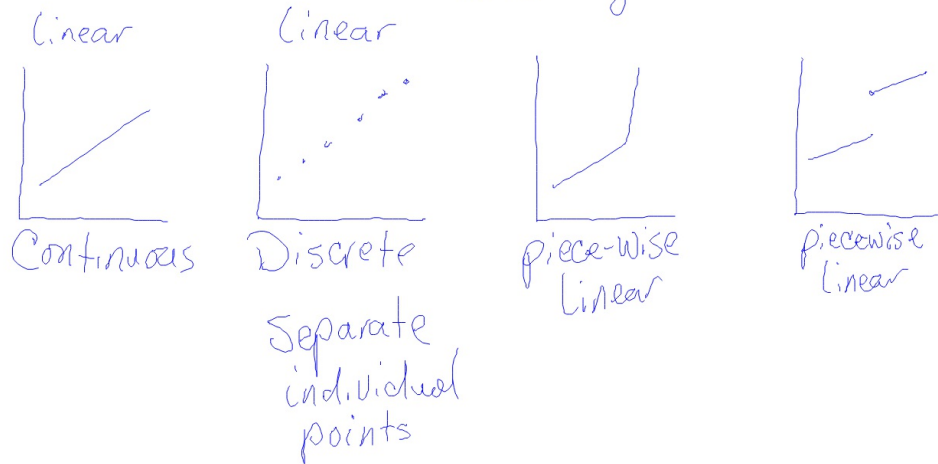
Cost of Living and Budget: Piece Rate

Practice: 2.3.2

IWBAT how to estimate hourly pay from piece rate, and model piece rates using scatter plots.

What is a linear equation? What is the difference between a continuous graph and a discrete graph?

Linear equation describes a constant rate of change



IWBAT

- model a salary that includes a starting bonus
- understand the y-intercept in a linear equation
- use piece-wise functions to model changes in salary
- explore the graphing function of a graphing calculator.

Cost of Living: Linear Equations and Wages

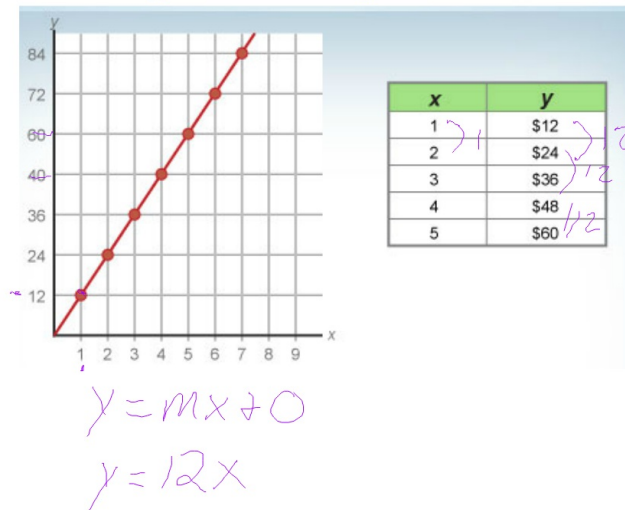
Review the general equation of a line and relate it to hourly wages.

$$y = mx + b$$

money earned → y
hourly wage → m
hours worked → x
starting bonus → b

What is the equation of a line whose y-intercept is not zero? $y = mx + b$

Cost of Living: Linear Equations and Wages

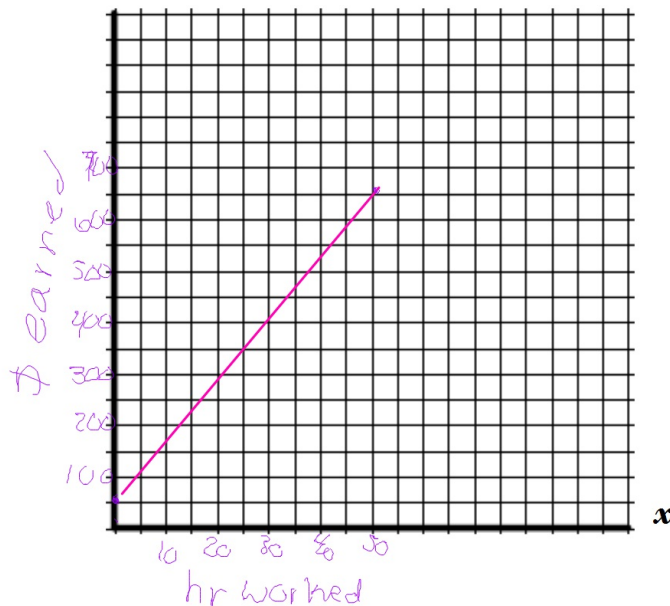


IWBAT model a salary that includes a starting bonus, understand the y-intercept in a linear equation, use piece-wise functions to model changes in salary, and explore the graphing function of a graphing calculator.

Cost of Living: Linear Equations and Wages

Suppose you are given a \$50 signing bonus at the boutique in addition to your \$12 an hour wage. You will now fill in a table for this situation, where x is the number of hours

y



$$y = 12x + 50$$

50 hr.

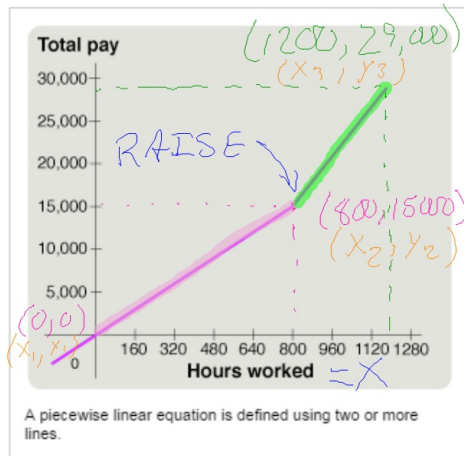
$$y = 12(50) + 50$$

$$y = 600 + 50$$

$$y = 650$$

IWBAT model a salary that includes a starting bonus, understand the y-intercept in a linear equation, use piece-wise functions to model changes in salary, and explore the graphing function of a graphing calculator.

Cost of Living: Linear Equations and Wages



$$y = mx \quad m = \frac{\text{rise}}{\text{run}}$$

$$y = 18.75x \quad \frac{15000}{800} = 18.75$$

$$m = \frac{29000 - 15000}{1200 - 800} = \frac{14000}{400} = 35$$

$$y = 35(x - 800) + 15000$$

$$y = m_2(x - x_2) + y_2$$

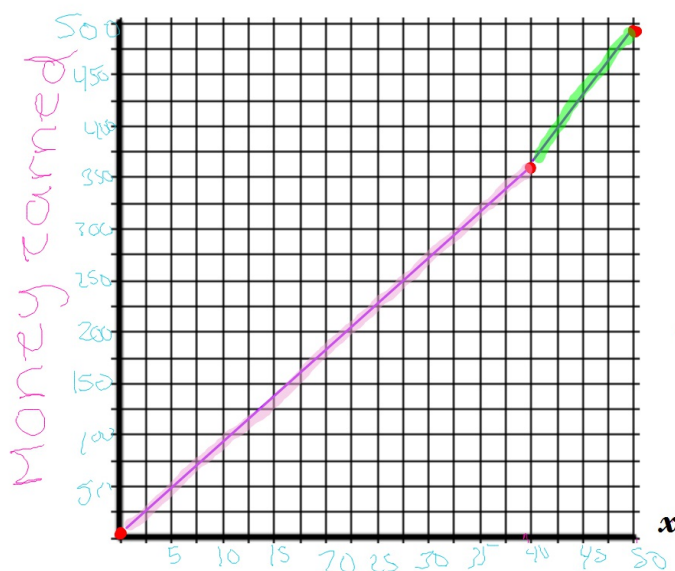
$$y = \begin{cases} 18.75x, & 0 \leq x \leq 800 \\ 35(x - 800) + 15000, & x > 800 \end{cases}$$

IWBAT model a salary that includes a starting bonus, understand the y-intercept in a linear equation, use piece-wise functions to model changes in salary, and explore the graphing function of a graphing calculator.

Flora's Work

Cost of Living: Linear Equations and Wages

Johnny makes \$9 per hour for the first 40 hours he works each week and makes 1.5*regular for overtime. Graph his pay. Give the piecewise equations.



$$y = 9(40) = 360 \text{ RT}$$

$$y = mx$$

$$y = 9x \quad 13.50 \times 10 = 135 \text{ OT}$$

$$135 + 360 = 495$$

$$y = m(x - x_2) + y_2$$

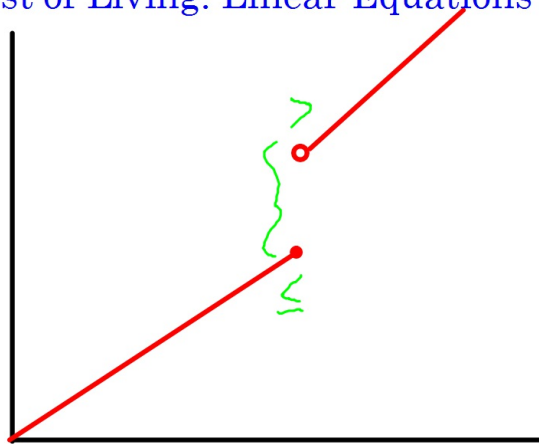
$$y = 13.50(x - 40) + 360$$

$$y = \begin{cases} 9x, & 0 \leq x \leq 40 \\ 13.50(x - 40) + 360, & x > 40 \end{cases}$$

← Hours worked

IWBAT model a salary that includes a starting bonus, understand the y-intercept in a linear equation, use piece-wise functions to model changes in salary, and explore the graphing function of a graphing calculator.

Cost of Living: Linear Equations and Wages



piecewise
continuous

IWBAT model a salary that includes a starting bonus, understand the y-intercept in a linear equation, use piece-wise functions to model changes in salary, and explore the graphing function of a graphing calculator.

Cost of Living: Linear Equations and Wages

Practice: 2.4.2

IWBAT model a salary that includes a starting bonus, understand the y-intercept in a linear equation, use piece-wise functions to model changes in salary, and explore the graphing function of a graphing calculator.

Cost of Living: Percentages and Commission

1/27/17

What is ten percent of 23,638?

$$23638(.10) = 2363.8$$

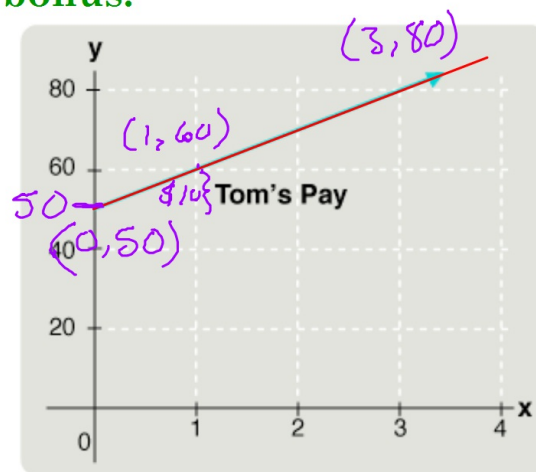
What is ten percent of 7,500 plus fifteen percent of 15,000?

$$(.10)7500 + (.15)15000$$

$$750 + 2250$$

$$3000$$

Given a graph, determine the employee's rate of pay and, if there was a bonus, the amount of that bonus.



bonus = \$50
\$10/hr

$$\begin{array}{r} \$60 - \$50 = X \\ \$50 + X = \$60 \\ \hline -\$50 \quad \quad -\$50 \end{array}$$

Cost of Living: Percentages and Commission

IWBAT

- understand graduated commission and base pay
- use percentages to compute a total commission.

Cost of Living: Percentages and Commission

What does it mean to be paid a commission?

You are paid depending on your sales.

Push money money for selling a specific product

Cost of Living: Percentages and Commission

Straight Commission

Same percentage no matter how much you sell or the prices

Flat Commission (Piece Rate)

a set dollar amount per item

IWBAT understand graduated commission and base pay, and use percentages to compute a total commission.

Cost of Living: Percentages and Commission

Graduated Commission Sold \$25,000

Amount Sold	Commission
Up to \$1000	10%
\$1000 - <u>\$20,000</u>	20%
<u>Over \$20,000</u>	25%

$$\begin{aligned}
 1000(.10) &= \$100 \\
 (2000-1000)(.20) &= \$3800 \\
 (25000-20000)(.25) &= \$1250 + \\
 &\underline{\$5150}
 \end{aligned}$$

Higher sales are rewarded with higher commission percentages.

IWBAT understand graduated commission and base pay, and use percentages to compute a total commission.

Cost of Living: Percentages and Commission

Total Commission

Total commission = number of items sold *
commission rate * cost of item sold

$$\$20 = (50)(.10)(\$4)$$

IWBAT understand graduated commission and base pay, and use percentages to compute a total commission.

Cost of Living: Percentages and Commission

Total Income

Total income = base pay + total commission

$$\$116 = 96 + 20$$

IWBAT understand graduated commission and base pay, and use percentages to compute a total commission.

Cost of Living: Percentages and Commission

Practice: 2.5.2

IWBAT understand graduated commission and base pay, and use percentages to compute a total commission.

Calculate the commission for an employee.

John is an appliance salesman. His pay is based on commission only and is currently 26% for each appliance sold. Last month he sold 3 dishwashers for \$499 each, 2 freezers for \$199 each, and 1 stainless steel oven for \$899. Find the total commissions John earned last month.

IWBAT

- Categorize budget expenditures/expenses

Cost of Living: Budget Odyssey

Guidelines for budget exploration activity & record of decisions w/ reasoning

IWBAT categorize budget expenditures/expenses

Cost of Living: Budget Odyssey

Working with a partner, you will:

1. Proceed to <http://econedlink.org/i145> .
2. Play the game Budget Odyssey online.
3. Discuss all decisions with your partner.
4. Record all of your decisions and reasoning on the graphic organizer (more copies available if needed).
5. Continue playing until you can complete the game without any incorrect decisions.
6. Turn in your graphic organizer at the end of class or the successful conclusion of the game (whichever comes first).
7. Work on previously assigned work which remains incomplete. **Now is a good time to set up your budget spreadsheet, if you have not already done so.**

IWBAT categorize budget expenditures/expenses

Cost of Living: Budget Odyssey

**Turn in your completed
record of expenditure
categorizations w/ reasoning.**

IWBAT categorize budget expenditures/expenses

Cost of Living: Required Paycheck Deductions 2/01/17

Categorize a set of budget expenditures/expenses

Student loan payment

Savings account interest

Mortgage payment

Renter's insurance

Purchase snow boots

Groceries

Paycheck

Tattoo

Diapers

Birthday money

Income

Paycheck

Savings account interest

Birthday money

Fixed expenses

Renter's insurance

Mortgage payment

Student loan payment

Variable expenses

Groceries

Tattoo Purchase snow boots

Diapers

Birthday money

IWBAT

- understand which deductions are required on a paycheck
- calculate how each deduction is made
- work through examples where all deductions are taken into account.

Cost of Living: Required Paycheck Deductions

What kinds of things are found as deductions on a paycheck?

✓ Federal Tax
✓ State Tax
✓ Medicare

✓ Social Security
Garnishment

City Tax
Medical Ins.
Car pmt.
Child Support
Retirement
Union Dues
Vision Ins.
Dental Ins.

Taxes

Deduction
PENSION-COLORADO PERA
CITY OCCUPATIONAL HEAD TAX
STATE WITHHOLDING TAX
FEDERAL WITHHOLDING TAX
MEDICARE TAX - EMPLOYEE

Company Taxes

Deduction
PERA-EMPLOYER

Pre-Tax Deductions

Deduction
DELTA EXCLUSIVE PANEL PRETAX
CIGNA - HMO LOW - Pretax
VISION INSURANCE PRETAX

After-Tax Deductions

Deduction
DEN CLASSROOM TCHRS ASSOC - FT

Company Deductions

Deduction
CIGNA - HMO LOW - ER

Cost of Living: Required Paycheck Deductions

Gross income *Income before taxes + deductions*

Net income *Income after taxes + deductions*
"take home pay"

Required deductions:

- Federal Income Tax
- State Income Tax
- Social Security
- Medicare

IWBAT understand which deductions are required on a paycheck, calculate how each deduction is made, and work through examples where all deductions are taken into account.

Cost of Living: Required Paycheck Deductions

Federal Insurance Contributions Act (FICA)

FICA = Social Security + Medicare

Social Security: 6.2%

Medicare: 1.45%

FICA 7.65%

Pay periods:

- Annually *1 time per year*
- Quarterly *4*
- Monthly *12*
- Biweekly *26*
- Weekly *52*
- Semi-monthly *24*

IWBAT understand which deductions are required on a paycheck, calculate how each deduction is made, and work through examples where all deductions are taken into account.

Cost of Living: Required Paycheck Deductions

Johnny makes \$9 per hour for the first 40 hours he works each week. He is paid biweekly. How much is deducted from his paycheck for FICA? 7.65%

$$\begin{array}{r} 40 \\ \times 9 \\ \hline 360 \\ \times 2 \\ \hline 720 \\ \times 0.0765 \\ \hline \$55.08 \end{array}$$

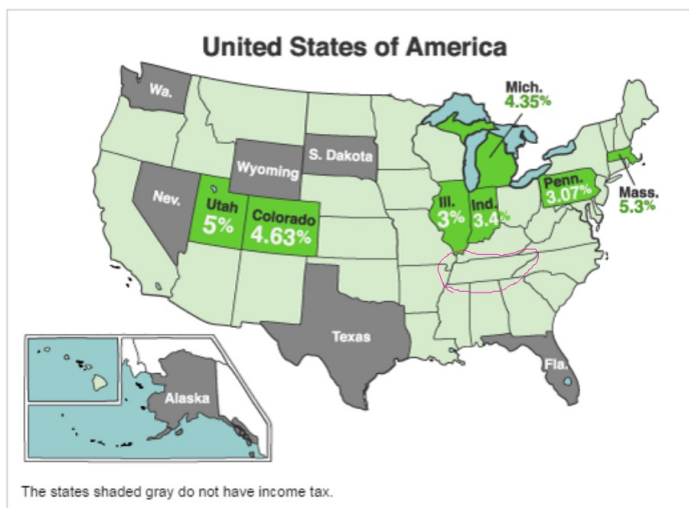
IWBAT understand which deductions are required on a paycheck, calculate how each deduction is made, and work through examples where all deductions are taken into account.

Cost of Living: Required Paycheck Deductions

State Income Tax

None

Flat tax *Everyone pays the same % of their income no matter how much they earn.*



IWBAT understand which deductions are required on a paycheck, calculate how each deduction is made, and work through examples where all deductions are taken into account.

Cost of Living: Required Paycheck Deductions

Income Tax

Progressive tax

Tax brackets

the higher your income, the larger the % you pay in taxes

the income levels taxable at each percentage

Single Taxpayers:

If Taxable Income Is:	The Tax Is:
Not over \$9,075	10% of the taxable income
Over \$9,075 but not over \$36,900	\$907.50 plus 15% of the excess over \$9,075
Over \$36,900 but not over \$89,350	\$5,081.25 plus 25% of the excess over \$36,900
Over \$89,350 but not over \$186,350	\$18,193.75 plus 28% of the excess over \$89,350
Over \$186,350 but not over \$405,100	\$45,353.75 plus 33% of the excess over \$186,350
Over \$405,100 but not over \$406,750	\$117,541.25 plus 35% of the excess over \$405,100
Over \$406,750	\$118,118.75 plus 39.6% of the excess over \$406,750

50K →

500K →

500M →

IWBAT understand which deductions are required on a paycheck, calculate how each deduction is made, and work through examples where all deductions are taken into account.

Cost of Living: Required Paycheck Deductions

Practice: 2.6.2

IWBAT understand which deductions are required on a paycheck, calculate how each deduction is made, and work through examples where all deductions are taken into account.

Cost of Living: Optional Paycheck Deductions

2/06/17

Imagine you are applying for a job that pays \$46,200 per year.
You live in New York, which has the following income tax brackets:

Single and married filing separately — filing status ① and ③.		
over	but not over	The tax is:
\$ 0	\$ 8,000	
8,000	11,000	\$320 plus 4.5% of the excess over \$ 8,000
11,000	13,000	455 plus 5.25% " " " "
13,000	20,000	560 plus 5.9% " " " "
20,000	200,000	973 plus 6.85% " " " "
200,000	500,000	13,303 plus 7.85% " " " "
500,000		36,853 plus 8.97% " " " "

Your federal income tax rate is 22%. What is your net income after all required deductions?

FICA 7.65%
Fed. IT 22%
State IT

\$46,200
- 16,466
\$29,734

$$\text{FICA } (0.0765)(46,200) = \$3,534.30$$

$$\text{Fed IT } (0.22)(46,200) = \$10,164.00$$

$$\text{State IT } 973 + (0.0685)(46,200 - 20,000) = \$2,767.70$$

$$\Sigma = \$16,466.00$$

Cost of Living: Optional Paycheck Deductions

2/06/17

IWBAT

- explore optional deductions such as health insurance, life insurance, disability, and retirement
- practice computing optional deductions
- understand which optional deductions reduce your taxable income.

Cost of Living: Optional Paycheck Deductions

What kinds of deductions are optional?

Dental Health } Insurance
Life
Vision

Charity

Garnishment

City Income Tax

Union dues

Retirement

Uniform

Taxes

Deduction
PENSION-COLORADO PERA
CITY OCCUPATIONAL HEAD TAX
STATE WITHHOLDING TAX
FEDERAL WITHHOLDING TAX
MEDICARE TAX - EMPLOYEE

Company Taxes

Deduction
PERA-EMPLOYER

Pre-Tax Deductions

Deduction
DELTA EXCLUSIVE PANEL PRETAX
CIGNA - HMO LOW - Pretax
VISION INSURANCE PRETAX

After-Tax Deductions

Deduction
DEN CLASSROOM TCHRS ASSOC - FT

Company Deductions

Deduction
CIGNA - HMO LOW - ER

Cost of Living: Optional Paycheck Deductions

Medical Insurance - to help you recover from illness or injury and to keep you healthy

Health

Dental

Vision

IWBAT explore optional deductions such as health insurance, life insurance, disability, and retirement, practice computing optional deductions, and understand which optional deductions reduce your taxable income.

Cost of Living: Optional Paycheck Deductions

Disability Insurance - injury prevents you from carrying out the duties of your job

SSD

workman's compensation

Life Insurance - pays your beneficiaries in the case of your demise

IWBAT explore optional deductions such as health insurance, life insurance, disability, and retirement, practice computing optional deductions, and understand which optional deductions reduce your taxable income.

Cost of Living: Optional Paycheck Deductions

Retirement - money to get you through your old age after you are no longer working

401(k)/403(B) Pension
for profit nonprofit IRA

Pre-tax vs. Post-tax

↳ items reduce your taxable income

IWBAT explore optional deductions such as health insurance, life insurance, disability, and retirement, practice computing optional deductions, and understand which optional deductions reduce your taxable income.

Cost of Living: Optional Paycheck Deductions

Calculating Deductions

$$\text{deduction per paycheck} = \frac{\text{annual cost}}{\text{\# of paychecks}} * \% \text{ employee covers}$$

Ana's employer covers 80% of the cost of a \$5700-per-year health insurance plan, and her share of the cost of the plan is her only optional deduction. How much is deducted from Ana's paycheck each month for health insurance?

$$\frac{\$5700}{12} (20\%) = \$95$$

IWBAT explore optional deductions such as health insurance, life insurance, disability, and retirement, practice computing optional deductions, and understand which optional deductions reduce your taxable income.

Cost of Living: Optional Paycheck Deductions

Practice: 2.7.2

IWBAT explore optional deductions such as health insurance, life insurance, disability, and retirement, practice computing optional deductions, and understand which optional deductions reduce your taxable income.

Calculate an employee's monthly insurance deduction.

Braden's employer covers 30% of the cost of a \$11,100-per-year health insurance plan, and Braden's share of the cost of the plan is his only optional deduction. How much is deducted from Braden's biweekly paycheck for health insurance?

$$\text{employer } 30\% \quad \$11,100/\text{yr} \quad \text{biweekly pc}$$

$$(.30)(\$11,100) = \$3,330$$

$$\frac{\$7770}{26 \text{ pc}} = \$298.84/\text{pc}$$

\$11,100 total
- 3330 employer
\$ 7770 Braden

IWBAT

- explore various sources of income
- consider the relationship between income and career preparation
- explore correlations between income and a worker's skills, education, type of work, and the health of the economy.

Cost of Living: Income and Career

Explore various sources of income.

Employment

Pros:

Dependable income — you have a paycheck every week, every two weeks, or every month. The type of employment you can obtain is dependent on your education and experience — things you can control. You work regular hours — usually 35 to 40 each week.

Cons:

You are usually not in charge. Typically you do not get to make your own hours or choose what projects or tasks you must do. Your wages, hours, and level of responsibility are ultimately up to someone else.

Self-employment Freelance

Business owner

	Self-employed	Business owner
Differences	You are providing something that you are required to produce.	You own or run an entity that produces something.
	If you take time off, then you will not generate any income.	You can take time off and the business will still operate and generate revenue.
Similarities	You are your own boss. You must make all decisions. There are no taxes deducted from your gross income automatically. You must do this on your own.	

Investment *micro loans, stocks, bonds*

Cost of Living: Income and Career

Education

Degrees

Associates *2yr*
AA, AS

Bachelors *4yr or Assoc + 2yr*
BA, BS, BBA

Masters *Bach + 2yr*
MA, MS, MBA

Doctoral *Masters + 2-3yr*
PhD

Professional *Bach + 3yr*
MD, DDO, DDS + 3yr Internship
JD

Certificate

a few days - several months

on the job training

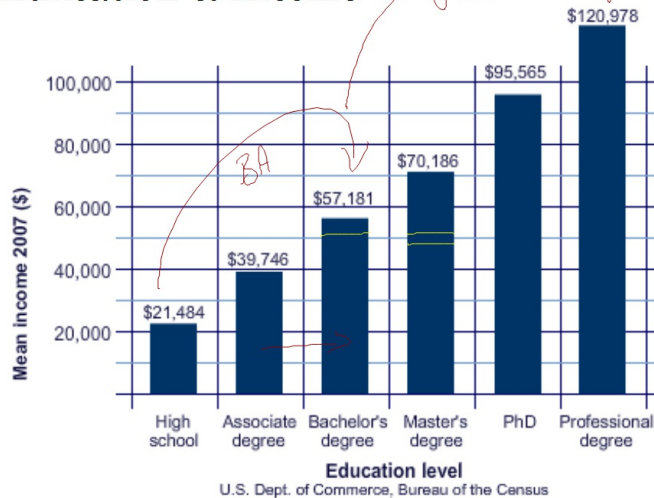
free Internet tutorials

Apprenticeship

Community college

IWBAT consider the relationship between income and career preparation, explore correlations between income and a worker's skills, education, type of work, and the health of the economy.

Cost of Living: Income and Career Education & Income



IWBAT consider the relationship between income and career preparation, explore correlations between income and a worker's skills, education, type of work, and the health of the economy.

Cost of Living: Income and Career Unemployment

$$\text{Unemployment} = \frac{\text{\# of workers willing and able to work but who are jobless}}{\text{total workers}}$$

To write this ratio as a percentage, you multiply its decimal form by 100.

$$\text{Unemployment rate (\%)} = \frac{\text{\# of workers willing and able to work but who are jobless}}{\text{total workers}} \cdot 100$$

Working with Unemployment Rates

This is a table of unemployment rates. For instance, by looking at the table, you can tell that in February of 2002, 5.7% of the population was unemployed.

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2000	4.0	4.1	4.0	3.8	4.0	4.0	4.0	4.1	3.9	3.9	3.9	3.9
2001	4.2	4.2	4.3	4.4	4.3	4.5	4.6	4.9	5.0	5.3	5.5	5.7
2002	5.7	5.7	5.7	5.9	5.8	5.9	5.8	5.7	5.7	5.7	5.9	6.0
2003	5.8	5.9	5.9	6.0	6.1	6.1	6.3	6.1	6.1	6.0	5.8	5.7
2004	5.7	5.6	5.8	5.6	5.6	5.6	5.6	5.4	5.4	5.5	5.4	5.4
2005	5.3	5.4	5.2	5.2	5.1	5.1	5.0	4.9	5.0	5.0	5.0	4.9
2006	4.7	4.8	4.7	4.7	4.6	4.6	4.6	4.7	4.5	4.4	4.5	4.4
2007	4.6	4.5	4.4	4.5	4.4	4.6	4.4	4.6	4.7	4.7	4.7	5.0
2008	5.0	4.8	5.1	5.0	5.4	5.5	5.4	6.1	6.2	6.6	6.9	7.4
2009	7.7	8.2	8.6	8.9	9.4	9.5	9.4	9.7	9.8	10.1	10.0	10.0
2010	9.7											

Data taken from Bureau of Labor Statistics

1. If there were 7.7 million people unemployed in December of 2007, how many millions of people were available to work?

$$0.05 = \frac{7.7m}{x}$$

$$\frac{7.7m}{0.05} = x \quad 154m$$

IWBAT consider the relationship between income and career preparation, explore correlations between income and a worker's skills, education, type of work, and the health of the economy.

Cost of Living: Income and Career

100
-7
93
+12.1
105.1

Okun's Law

% change in GDP =

$3\% - 2 * (\% \text{ change in unemployment rate})$

2001 %5

2009 %10

2016 %5

Types of unemployment

Structural

your skills are no longer desired

Frictional

you are between jobs

Cyclical

follows business cycles

Unemployment resistant careers

nurse, Doctor,
paramedics, govt, farmers, police, fire fighters, teachers,
military

IWBAT consider the relationship between income and career preparation, explore correlations between income and a worker's skills, education, type of work, and the health of the economy.

Cost of Living: Income and Career

Practice: 2.8.2

IWBAT consider the relationship between income and career preparation, explore correlations between income and a worker's skills, education, type of work, and the health of the economy.

What possible careers are in your future?

Dental assistant
Medical assistant -peds
Orthodontist
Cosmetologist
Veterinarian's assistant
CNA
Astrobiologist
X-ray Tech
National Guard
Masseuse
Chiropractor
Teacher

Bank Teller
Personal banker
Business owner
Photographer
Videographer
Attorney
Horticultural specialist
Mixologist
Waitress
Receptionist
Chef
Chauffeur

IWBAT

- Explain that supply and demand are the primary factors in determining wages.
- Identify several specific factors that affect wage rates.
- Explore wage rates in their potential careers.

Cost of Living: Wages and Me

Using the interview form, discuss plans for researching a possible career with two other students. Record their responses on your form.

IWBAT explain that supply and demand are the primary factors in determining wages, identify several specific factors that affect wage rates, and explore wage rates in their potential careers.

Cost of Living: Wages and Me

Procedure

1. Retrieve a computer.
2. Read page one of assignment.
3. Proceed to the URL in **bold**.
(http://www.bls.gov/oes/current/oes_nat.htm)
4. Follow the directions on page one of the assignment.
5. Record your answers to questions #1-10.
6. Write a short summary below "Conclusion" explaining
 - what you need to do over the next five years for your chosen career *OR*
 - why you now are looking into a different career other than the one chosen for this exploration.

IWBAT explain that supply and demand are the primary factors in determining wages, identify several specific factors that affect wage rates, and explore wage rates in their potential careers.

Cost of Living: Wages and Me

Using the interview form, reinterview one student after they have completed their research and have written their conclusion. Record their responses on your form.

Turn in both forms.

Work on practice problems 2.8.2

IWBAT explain that supply and demand are the primary factors in determining wages, identify several specific factors that affect wage rates, and explore wage rates in their potential careers.

Cost of Living: Cost of Living and Budget

2/14/17

In the country of Apexistan, 6.9% of the population was unemployed in September of 2014. If there were 186,000,000 people willing and able to work in Apexistan during that month, how many people were unemployed? $< 186,000,000$

$$(0.69) \quad 186,000,000 = 128,340,000 +$$

$$\rightarrow 186,000,000 \div 0.069 = 2,695,652,174 \times$$

$$\frac{6.9}{100} = 0.069 \quad 0.069(186,000,000) = 12,834,000 +$$

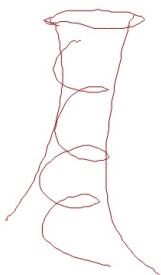
$$186,000,000 \text{ unemployed } 6.9\%$$

IWBAT

- analyze how economic conditions affect income
- explore various types of monthly expenditures.

Cost of Living: Cost of Living and Budget

Compare income to the cost of living in various geographical areas.



CPI	New York	Philadelphia	Los Angeles	Cleveland	Atlanta
Overall	165	92	156	78	112
Food	142	106	113	106	100
Housing	203	56	235	27	134
Utilities	165	130	115	126	93
Transportation	120	117	108	106	104
Health	182	102	120	113	104
Miscellaneous	136	112	107	100	99



CPI compares the cost of living in each area to the average for the nation (100).

Denver

<http://www.bls.gov/cpi/>

IWBAT analyze how economic conditions affect income and explore various types of monthly expenditures.

Cost of Living: Cost of Living and Budget

Standard of living

how well you are living on a given income

CPI ↓ St. of Living ↑
CPI ↑ ↓

Budget

Money set aside to be spent on specific things

IWBAT analyze how economic conditions affect income and explore various types of monthly expenditures.

Cost of Living: Cost of Living and Budget

Budget items

Housing

$\frac{1}{4}$ of monthly income
1 week's pay

\$36,000 salary

$\frac{52}{52} = \$692.30$

Utilities

minimize

Groceries

cook at home, coupons, buy only what you need, sales, shop around, buy in bulk, membership, store brands

Other expenses

gas, entertainment, transportation, clothing, toiletries, phone bill, baby needs, pets

IWBAT analyze how economic conditions affect income and explore various types of monthly expenditures.

Cost of Living: Cost of Living and Budget

Practice: 2.9.2

IWBAT analyze how economic conditions affect income and explore various types of monthly expenditures.